



TOOL



Sybase® PowerBuilder® 9.0
Open IDE at Light Speed

velocity

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PowerBuilder 9.0 rapid application development (RAD) software takes a quantum leap in innovation that will allow you to propel your application development projects to new dimensions. This latest version of the industry's premier 4GL Integrated Development Environment provides superior next-generation capabilities for building applications for heterogeneous deployment architectures such as the Microsoft®.NET framework and J2EE.

PowerBuilder 9.0 delivers the breadth and depth of functionality to build world-class client-server applications as well as the capabilities—such as Web Services, RAD JavaServer Pages™, and 3rd-party application server support—to move your development into distributed and Web architectures.

PowerBuilder 9.0: Foundations for Open RAD 4GL^{plus}

Building upon its history of providing leading-edge 4GL RAD capabilities, PowerBuilder 9.0 continues this tradition by delivering a new basis from which to create applications for client-server, Web, and n-tier architectures. This higher level of RAD programming allows you to create applications for all these environments with the ease, speed, and cost-effectiveness that you both demand and expect for your mission-critical applications.

PowerBuilder's evolution as a high-productivity development environment reaches a new level with the 9.0 release, driving the first stake in the ground for delivering the next stage in RAD programming, "4GL^{plus}". From the powerful PowerBuilder Document Object Model for XML to Web Services to 3rd-party application server integration, PowerBuilder 9.0 delivers a programming environment at the top of its class.

XML DataWindow®

PowerBuilder's patented DataWindow technology brings the power of XML to development projects. A new view in the DataWindow painter builds XML templates graphically as part of the DataWindow object. These templates allow for importing or exporting data in XML format. The XML logical structure of how row data iterates inside the root element of an XML document can be specified.

PowerBuilder Document Object Model

The PowerBuilder Document Object Model (PBDOM) is a complete application programming interface (API) that is used to create, read, write and manipulate XML documents. This Sybase implementation of the Document Object Model allows easy access to, and manipulation of, XML documents using standard PowerScript. PBDOM is based on a collection of non-visual classes and is built using PowerBuilder Native Interface technology.

RAD JavaServer Pages™

PowerBuilder 9.0 delivers an easy-to-use development environment for building JSP Web applications, automating many development tasks and allowing deployment of Web applications to JSP 1.2 compatible servers.

The JSP Web Target wizard automates the creation of a JSP target J2EE Web application, including the deployment configuration parameters. JSP Web targets can be deployed directly from PowerBuilder to EAServer or Tomcat, and a command line option allows deployment to other popular JSP containers.

Web Services

A PowerBuilder application can act as a client consuming a Web service over an Intranet or on the Internet. Using SOAP and WSDL, a collection of functions published remotely as a single entity can become part of a PowerBuilder application. Using the EAServer toolkit, PowerBuilder custom class user objects easily can be deployed and exposed as Web Services.

Web Services Wizard in the PowerBuilder IDE creates a proxy object or custom tag library containing the information necessary to call Web Services from a PowerBuilder application or JSP page.

Microsoft .NET™ Support

Initial support for the .NET framework in PowerBuilder 9.0 is delivered through Web Services, the first of several planned phases of .NET integration for PowerBuilder.

Client-EJB Server Support

Use the power of PowerBuilder to access Java server-side business logic. Instead of spending months or years building applications in Java, PowerBuilder can rapidly build a rich, sophisticated application that accesses EJB's running on a J2EE-compliant application server such as Sybase EAServer, IBM WebSphere™ Application Server, BEA WebLogic™ Server, and other application servers.

PowerBuilder Native Interface

The PowerBuilder Native Interface (PBNI) is a powerful feature that allows developers to add their own functionality to PowerBuilder. It is an API that opens two doors from PowerBuilder to the outside world.

First, DLLs can be created that provide one or more classes to be used within PowerBuilder as native custom class user objects. This enables developers to write extension libraries and access them inside

PowerBuilder just like other visual or non-visual user objects created within the PowerBuilder IDE.

Second, the PowerBuilder Virtual Machine (VM) can be embedded in C++ or Java applications, or any other applications that can call C++, to invoke business logic written in PowerScript.

Source Control

As a major productivity improvement in the source code control (SCC) interface, PowerBuilder 9 introduces a background thread of execution to initialize workspaces, thus eliminating startup delays for large applications. The introduction of revision numbers provides dramatic performance improvements in determining synchronization status for SCC vendors that support a new integration extension. Additionally, OrcaScript functionality can be used to create application PBLs directly from an SCC repository.

OrcaScript

OrcaScript allows the development of batch scripts to process PowerBuilder applications and files outside of the PowerBuilder development environment. OrcaScript can retrieve the latest version of a PowerScript target from source control, build the target PBLs, deploy components to EAServer, and compile PowerBuilder executable files—all without operator intervention.

PDF Support

PowerBuilder provides two ways to save a DataWindow object so that it can directly generate reports in PDF format. The distill method is used by default and can save all types of DataWindow objects. The DataWindow's data and presentation also can be saved as a document or string using XSL Formatting Objects (XSL-FO) or PDF.

HIGHLIGHTS

Integration and Openness

- Web Services provides integration with J2EE™ and .NET.™
- PowerBuilder Native Interface extends PB to C++ applications.
- EJB-client support of J2EE-compliant servers expands the reach of PowerBuilder applications.

Time to Market

- RAD 4GL provides greatest productivity for client-server, Web, and n-tier development.

Web and N-Tier Development

- XML Datawindow enables better communication with other applications.
- RAD JavaServer Pages™ gets you on the Web quickly.
- PowerBuilder Document Object Model allows manipulation of XML documents.
- Support of J2EE-compliant application servers.

Life-cycle Management

- Tight version control makes managing projects easier.
- Integration with Sybase PowerDesigner improves overall development process.

MINIMUM SYSTEM REQUIREMENTS

- 400 MHz or higher Pentium-compatible CPU
- CD ROM drive
- SVGA monitor
- 64MB Memory (128MB recommended)
- 210MB hard disk space*
- Microsoft® Windows NT® SP6a, Windows® 2000 SP2, Windows XP.

* Disk space taken by a typical PowerBuilder 9.0-only install. Actual disk space required is based on the number of products installed and options chosen. Additional temp space is required on the hard disk during installation for uncompressing install files.

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